

Fig. 1: Basic Forward Switching Converter Topology

Reference	Description	Reference	Description
Q1	Main Switching Transistor	T1	Transformer
D1	Forward Output Diode	D2	Freewheel Output Diode
L1	Output Filter Inductor	C1	Output Filter Capacitor

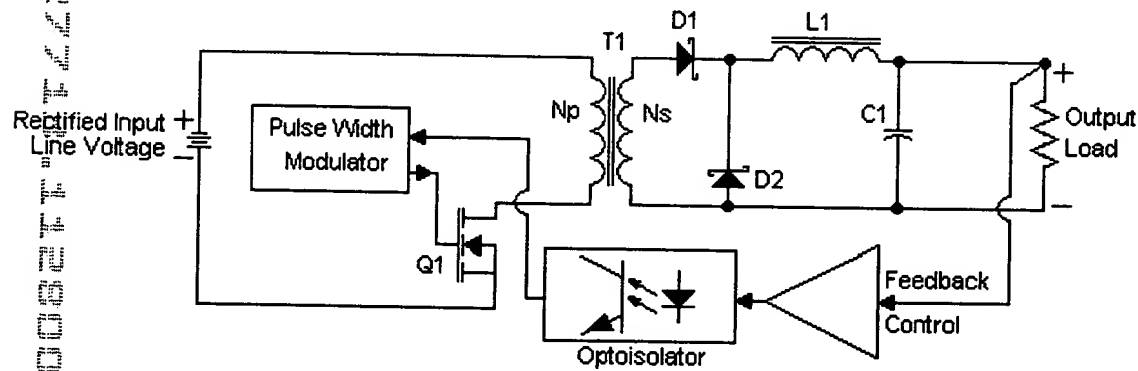


Fig. 1A: Basic Forward Switching Converter Topology Using Schottky Rectifiers

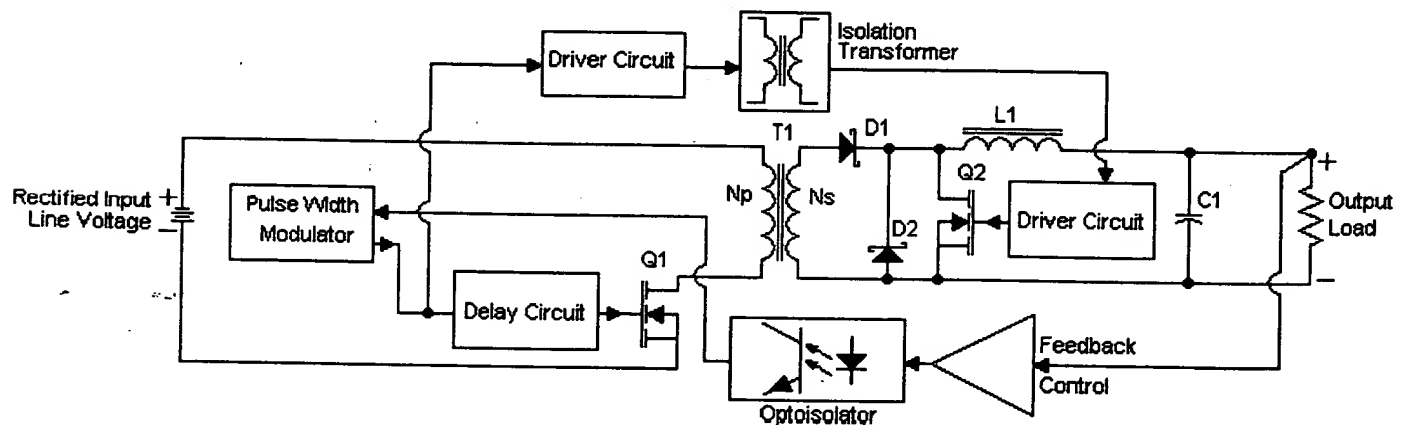


Fig. 1B: Synchronous-Rectified Converter with Primary Side Control; Prior Art



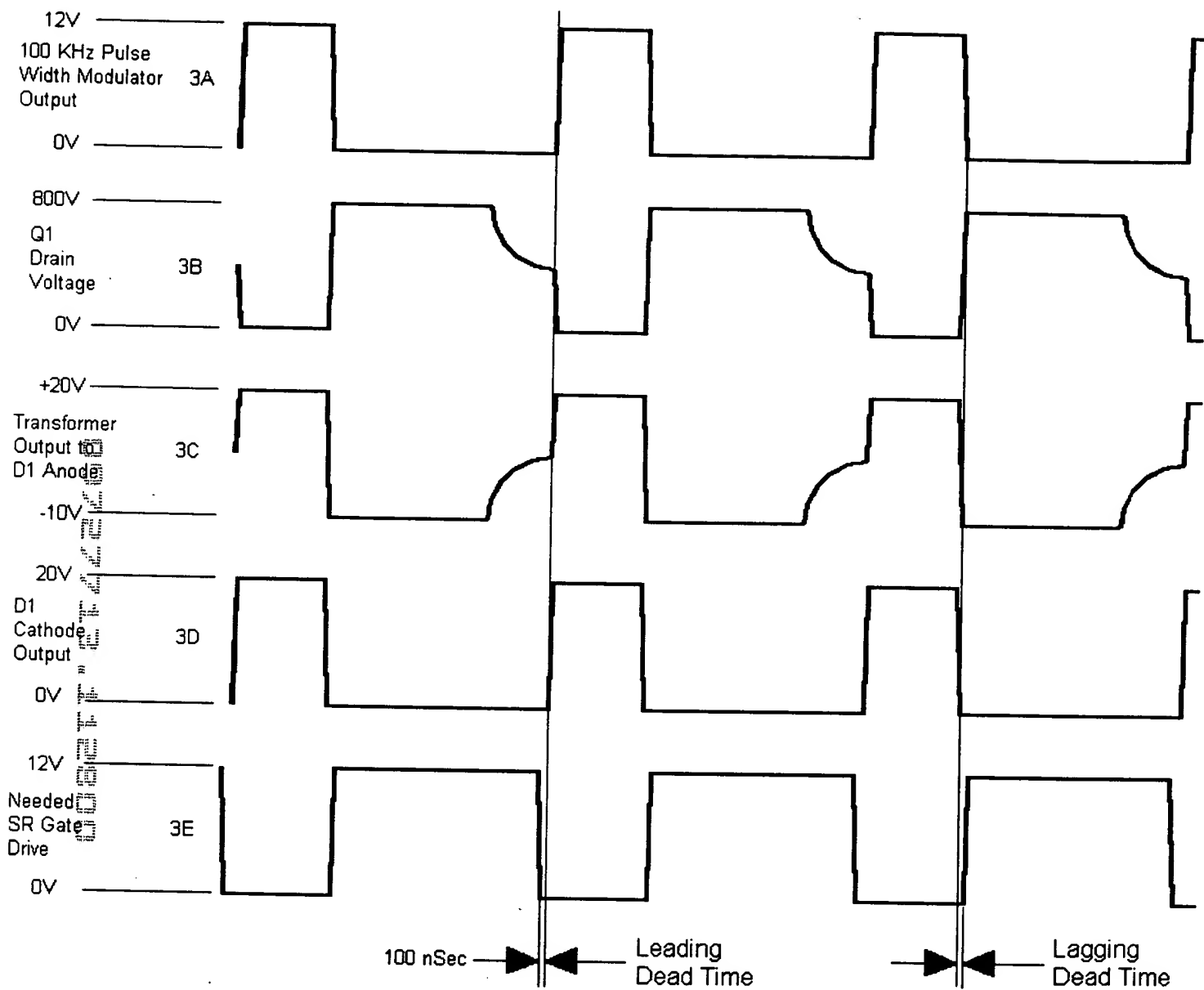


Fig. 3: Synchronous Rectifier Timing Diagram

It is desirable to have a circuit which can drive the SR without the drawbacks listed above. The proposed new design would use timing information from the output of T1, D1 and would look like Fig. 5 shown below:

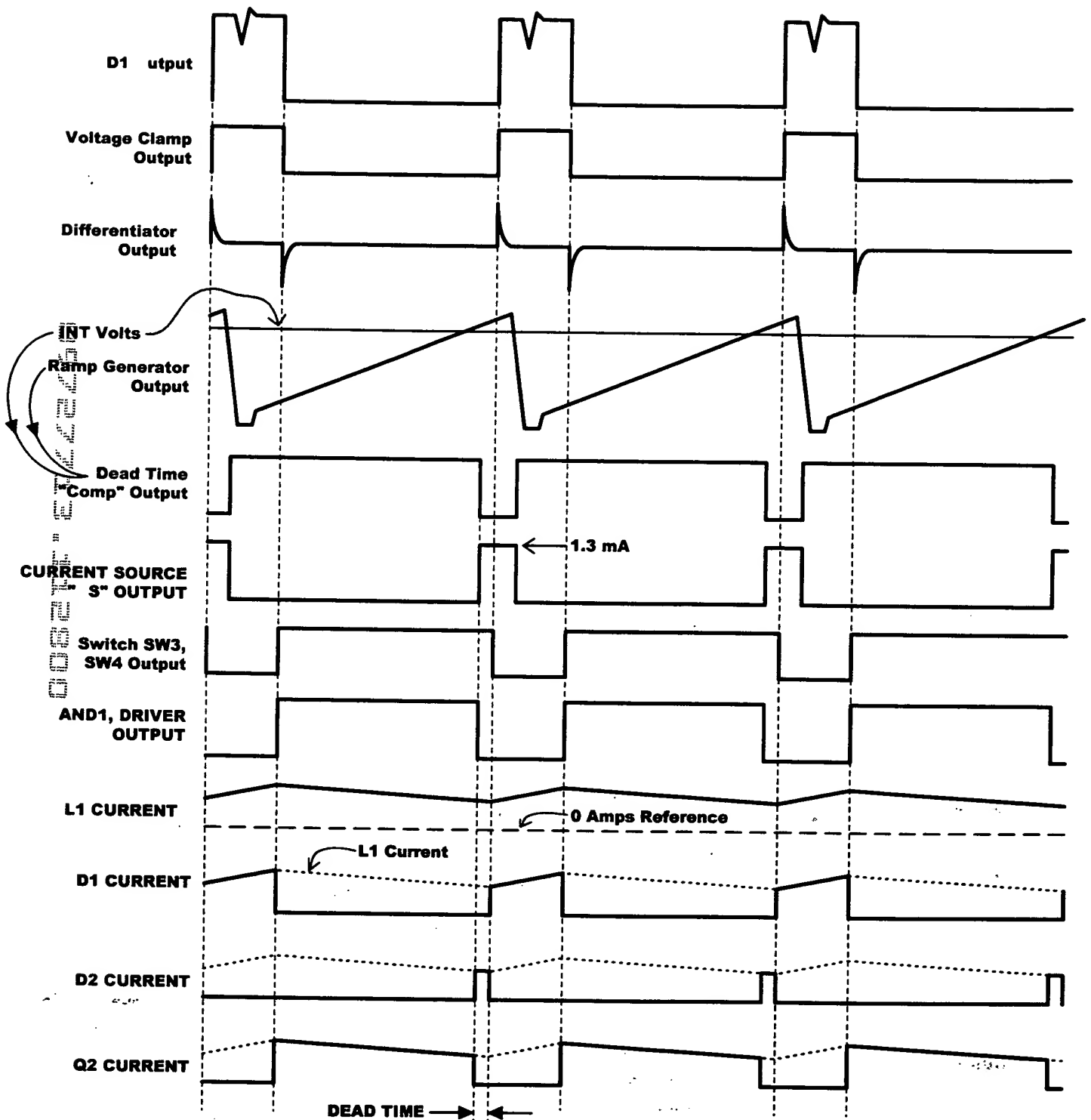


FIGURE 8. CIRCUIT TIMIN DIAGRAM

**CURRENT SOURCE**  
**"C8" OUTPUT**

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**"C8" OUTPUT**

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